



Magnetic Cylinder Sensors Sensors for T-slot cylinders

MZT1-03VNS-KP0



Model Name > [MZT1-03VNS-KP0](#)
Part No. > [1017851](#)



At a glance

- Compact housing design
- LED function indicator
- IP 67 enclosure rating
- Magneto-resistive (GMR) element
- For all commonly used cylinders with T-slots, e.g., Festo or SMC and it can be applied to multiple cylinders types such as round, tie-rod, integrated profile or dove-tail cylinders with mounting brackets

Your benefits

- Economic solution providing reliable switching performance
- Drop-in T-slot mounting from above makes assembly easy
- Easy installation with Allen wrench
- Resistant to shock, vibration and liquids, enlarging sensor life time



Features

| | |
|------------------------------|--|
| Output type: | NPN |
| Output function: | NO |
| Electrical wiring: | DC 3-wire |
| Enclosure rating: | IP 67 ¹⁾ |
| Sensing face: | Front |
| Cylinder types with adapter: | Profile cylinder Roundbody cylinder Dove-tail groove cylinder SMC rail cylinder CDQ2 (T-Slot) SMC rail cylinder ECDQ2 (T-Slot) Tie rod cylinder |
| Housing length: | 30.5 mm |
| Switching frequency typ.: | 5,000 Hz |
| Cylinder type: | T-slot |

¹⁾ According to EN 60529

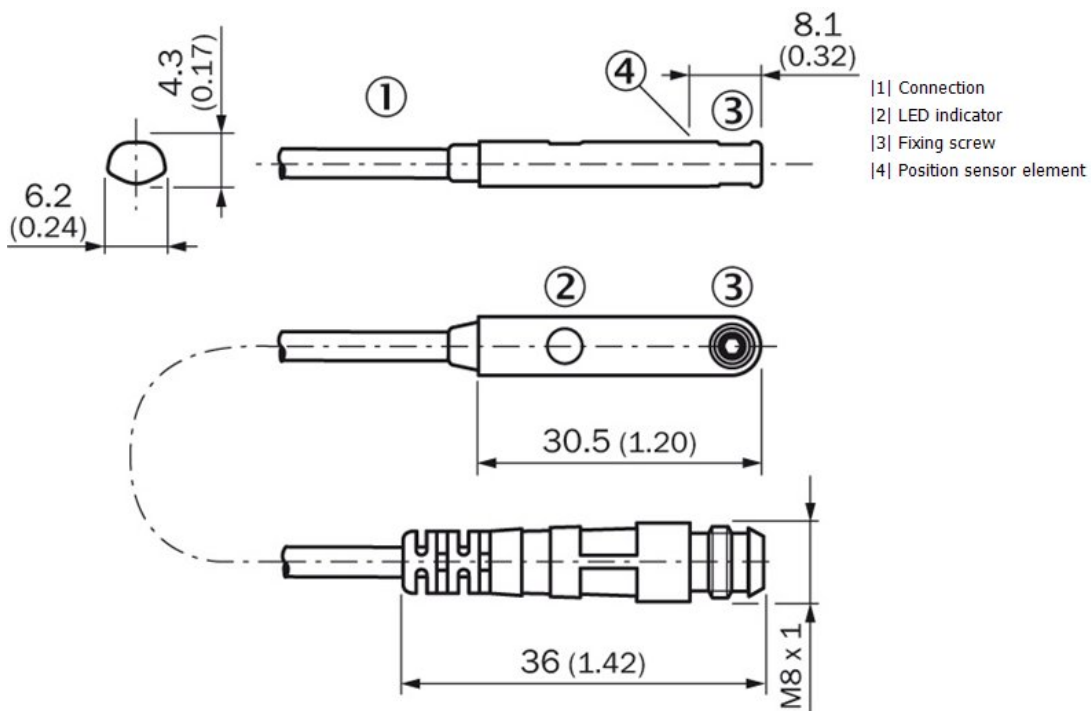
Mechanics/electronics

| | |
|---------------------------------|---------------------------------------|
| Connection type: | Cable with connector M8, 3-pin, 0.3 m |
| Supply voltage: | 10 V DC ... 30 V DC |
| Power consumption: | ≤ 10 mA ¹⁾ |
| Voltage drop: | ≤ 2 V ²⁾ |
| Output current I _a : | ≤ 100 mA |

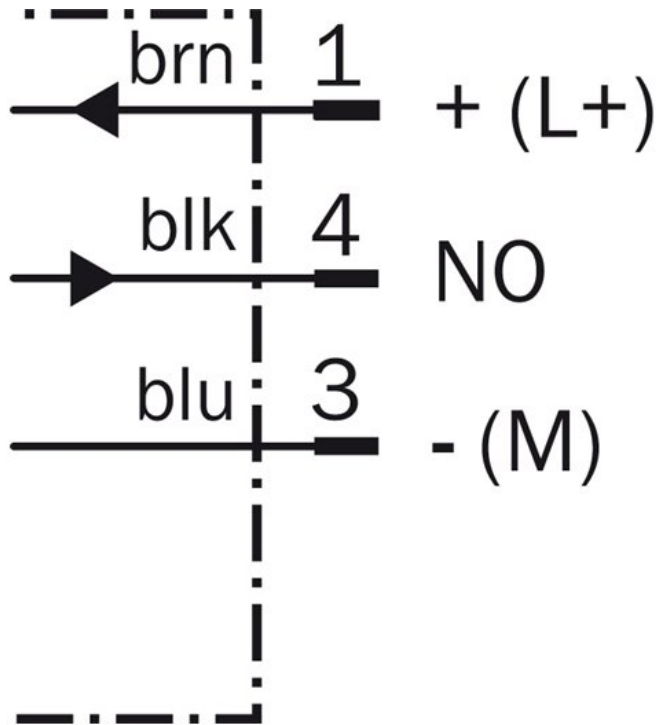
| | |
|-----------------------------------|--------------------------------|
| Hysteresis: | ≤ 0.5 mT |
| Repeatability: | ≤ 0.1 mT ³⁾ |
| EMC: | According to EN 60947-5-2 |
| Cable material: | PUR |
| Conductor cross-section: | 0.14 mm ² |
| Reverse polarity protection: | ✓ |
| Short-circuit protection: | ✓ |
| Housing material: | Plastic |
| Sensing face material: | Plastic |
| Ambient operating temperature: | -25 °C ... 75 °C |
| Power-up pulse protection: | ✓ |
| Thread size: | M8 |
| Magnetic field sensitivity, min.: | ≤ 2.8 mT |
| Output indicator: | ✓ |
| Overrun distance typ.: | 9 mm |
| Shock/vibration: | 30 g, 11 ms/10 ... 55 Hz, 1 mm |

1) Without load 2) At I_{max} 3) U_b and T_a constant

Dimensional drawing



Connection diagram



Connection type



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